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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,008	02/20/2002	Takahiro Shoji	L9289.02121	4520
24257 75	90 09/19/2005		EXAM	INER
STEVENS DAVIS MILLER & MOSHER, LLP			CHUEN, MICHAEL P	
1615 L STREET, NW SUITE 850 WASHINGTON, DC 20036			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/069,008	SHOJI ET AL.			
Office Action Summary	Examiner	Art Unit			
		2661			
The MAILING DATE of this communication a	Michael Chuen				
Period for Reply	<b></b>				
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statt Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 1.136(a). In no event, however, may a red of will apply and will expire SIX (6) MON ute, cause the application to become AB	CATION.  eply be timely filed  THS from the mailing date of this communication.  EANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 2/2	<u>20/2002</u> .				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
3) Since this application is in condition for allow	•				
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1-6 is/are pending in the application	1.				
4a) Of the above claim(s) is/are withdr	rawn from consideration.				
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-6</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and	or election requirement.				
Application Papers					
9) The specification is objected to by the Examin	ner.				
10)⊠ The drawing(s) filed on 20 February 2002 is/a		objected to by the Examiner.			
Applicant may not request that any objection to the	ne drawing(s) be held in abeyan	ice. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the corre	ection is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).			
11) ☐ The oath or declaration is objected to by the l	Examiner. Note the attached	Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreig a)⊠ All b)□ Some * c)□ None of:	gn priority under 35 U.S.C. §	119(a)-(d) or (f).			
1. Certified copies of the priority docume					
2. Certified copies of the priority docume					
3. Copies of the certified copies of the pr		received in this National Stage			
application from the International Bure	•	received			
* See the attached detailed Office action for a lis	st of the certified copies flot	received.			
Attachment(s)					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>		Summary (PTO-413) s)/Mail Date			
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	🗖	nformal Patent Application (PTO-152)			

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### **DETAILED ACTION**

# **Drawings**

The drawings are objected to because figures 1 and 2 should be labeled as prior art. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

1) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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2) Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, the phrase "with reference to" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "with reference to"), thereby rendering the scope of the claim(s) unascertainable. In the 103 rejection for claim 5 below, it is assumed that the applicant refers to the process of selecting a channel that exceeds a certain threshold CIR level. See MPEP § 2173.05(d).

# Claim Rejections - 35 USC § 102

3) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4) Claim 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kojiro.

Kojiro in Japanese patent application 11-75248 includes base station 111 which chooses a frequency for uplink and downlink in a reverse order (paragraph 11). Kojiro also includes base station receiving circuits 840 and sending circuits 850 connected to antenna 810 for transmission and reception.

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With respect to claim 3, Kojiro also includes in drawing 9, a mobile station with receiving circuit 940 and sending circuit 950 connected to an antenna 910 for transmission and reception.

# Claim Rejections - 35 USC § 103

- 5) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7) Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kojiro v. Minoru et al.

Kojiro discloses the invention recited in the 102(b) rejection stated above. Minoru et al. in Japanese patent application 11-261518 teach a time slot allocation method which assigns time slots 11 after a slot in the middle of the time slots (drawing 1, 11-N/2). It would have been obvious to one skilled in the art at the time of invention to assign time slots for the uplink and downlink in reverse priority after a slot in the middle of the time slots since the first time slot assigned is arbitrary.

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8) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kojiro v. Minoru et al. as applied to claim 2 above, and further in view of Ozluturk.

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Kojiro v. Minoru et al. disclose the modified invention described in the 103(a) rejection cited above. Kojiro also includes a mobile station 131 with antenna (drawing 9, no. 910) for communicating with the base station 111. Ozluturk in US patent number 6,373,830 teaches a maintenance power control method which measures the received power level and the current power level of the system to calculate the necessary transmit power (column 5, line 29). It would have been obvious to one skilled in the art at the time of invention to include a method of transmission power control to ensure sufficient reception power.

9) Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojiro v. Minoru et al. as applied to claim 2 above, and further in view of Haartsen.

Kojiro v. Minoru et al. disclose the modified invention described in the 103(a) rejection cited above. Haartsen in US patent number 5,491,837 teaches a channel allocation method which attempts to minimize the transmit power and to maintain a target signal to interference ratio. It would have been obvious to one skilled in the art at the time of invention to include a method for maintaining a sufficient signal to interference ratio in order to provide optimal signal quality.

#### Conclusion

10) The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. Ishii et al. disclose a mobile communication network which

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allocates a channel based upon autonomous reuse partitioning. Kanai provides a method of allocating channels based on carrier to interference ratios.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Chuen whose telephone number is 571-272-5206. The examiner can normally be reached on Monday - Friday, 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**MPC** 

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER

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